National Aeronautics and
Space Administration

Principal Center for Regulatory Risk Analysis and Communication

REGULATORY ALERT

Proposed Amendments to RICE NESHAP and NSPS for Stationary Internal Combustion Engines

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Title: National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE); New Source Performance Standards (NSPS) for Stationary Internal Combustion Engines	References: 77 FR 33812 (06/07/2012), EPA RICE website Citations: 40 CFR 63 Subpart ZZZZ, 40 CFR 60 Subpart IIII, and 40 CFR 60 Subpart JJJJ
Type: Proposed Rule	Source: U.S. Environmental Protection Agency

On 07 June 2012, the U.S. Environmental Protection Agency (EPA) published in the *Federal Register* (FR) proposed amendments to the RICE NESHAP and the NSPS for stationary engines. The proposed amendments include administrative updates and revisions to the requirements for three types of internal combustion engines–spark ignition (SI), compression ignition (CI), and emergency demand response engines.

Potential Impacts to NASA

NASA Centers and contractor facilities that own and operate stationary internal combustion engines should review the proposed amendments as alternatives that could provide cost savings and operational flexibility if they become final. Because this action would not extend the compliance dates for the 2010 RICE NESHAP amendments (currently 03 May 2013 for existing stationary CI RICE, and 19 October 2013 for existing stationary SI RICE), compliance with the requirements should continue as planned. Comments regarding the proposed provisions are due to EPA on 23 July 2012, or 30 days after a public meeting is held, if one is requested.

Summary of Proposed Amendments

The proposed changes are summarized by engine type in the following subsections.

Spark Ignition

- The addition of an alternative compliance demonstration method for spark ignition (SI) four-stroke rich-burn (4SRB) non-emergency engines of more than 500 horsepower (hp) at major sources and existing SI 4SRB non-emergency engines of more than 500 hp at area sources subject to a formaldehyde limit and choosing to meet the 76-percent formaldehyde emission reduction standard. The alternative compliance demonstration method would allow for testing of total hydrocarbon emissions and showing at least 30-percent reduction of those emissions (instead of testing for formaldehyde) to demonstrate compliance with the emission reduction standard.
- Management practices rather than emission limits, testing, and monitoring would be allowed for those area sources with existing four-stroke SI engines of more than 500 hp if five or fewer buildings intended to have human occupants are within 0.25 mile of the facility, or if the facility is on a U.S. Department of Transportation (DOT) Class 1 pipeline location.
- Area sources with existing spark ignition RICE of more than 500 hp where five or more buildings intended to have human occupants are within 0.25 mile of the facility, or if the facility is not on a DOT Class 1 pipeline location, would be required to install aftermarket hazardous air pollutant (HAP) controls and to comply with the associated monitoring and compliance options.

Emergency Demand Response

- An allowance of 100 hours per year would be provided for stationary emergency engines when used in an emergency demand response program to prevent electrical blackouts and improve grid reliability. The 100 hours per year would be part of the 100 hours available for maintenance and testing. This rule would not restrict emergency engine operation when no commercial power is available. The same allowance would be included in the NSPS.

- A temporary allowance would be provided to use the 50 hours of non-emergency operation toward peak shaving at the facility or in local financial arrangements with another entity for existing stationary emergency RICE at area sources. This allowance would expire on 16 April 2017.

Compression Ignition

- For clarification, existing Tier 3 certified CI engines (installed before 12 June 2006) of more than 300 hp at an area source are considered to comply with the NESHAP. This measure would create regulatory consistency with new engines of more than 300 hp (installed after that date.)
- Existing Tier 1 and Tier 2 CI engines at area sources that are subject to state and local requirements for replacement by 18 June 2018 would be allowed to implement management practices between 13 May 2013 to no later than 18 June 2018. This measure would avoid having to install controls on engines that shortly would be replaced.